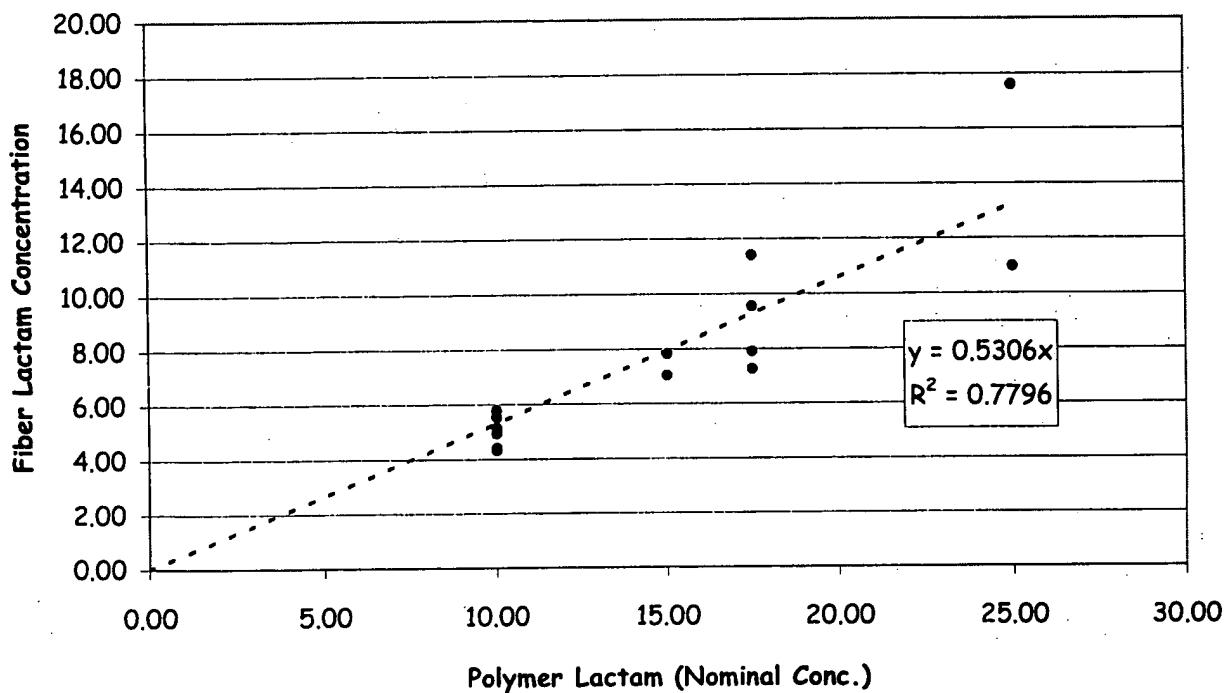


Fiber Lactam vs Original Polym r Lactam

Fig.  
①



Onset of Melting vs Lactam Concentration

25 denier bundle

Fig.  
②

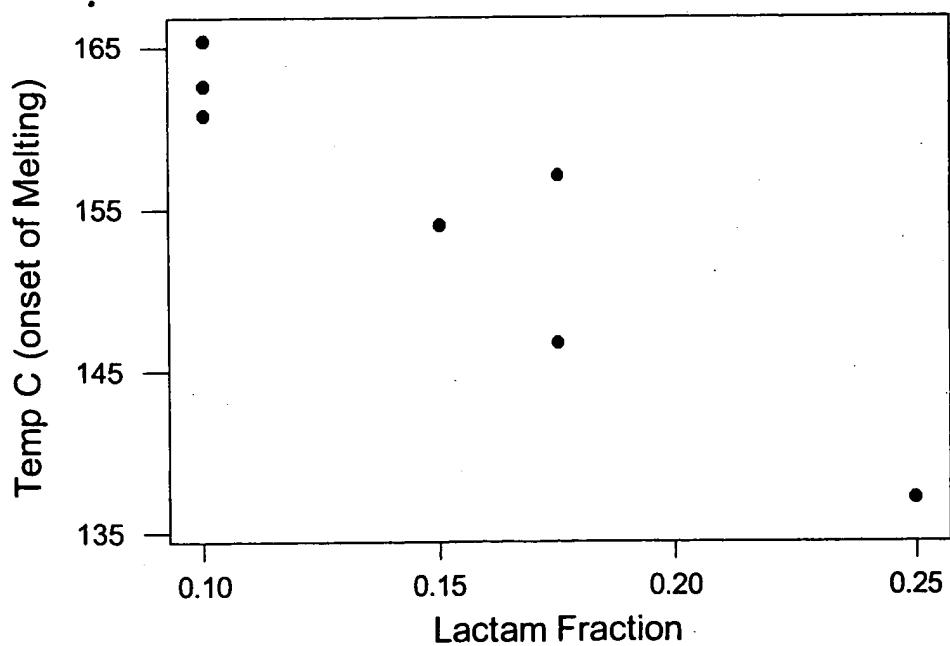


Fig  
③

### PlyBonds vs Nylon/Binder Ratio

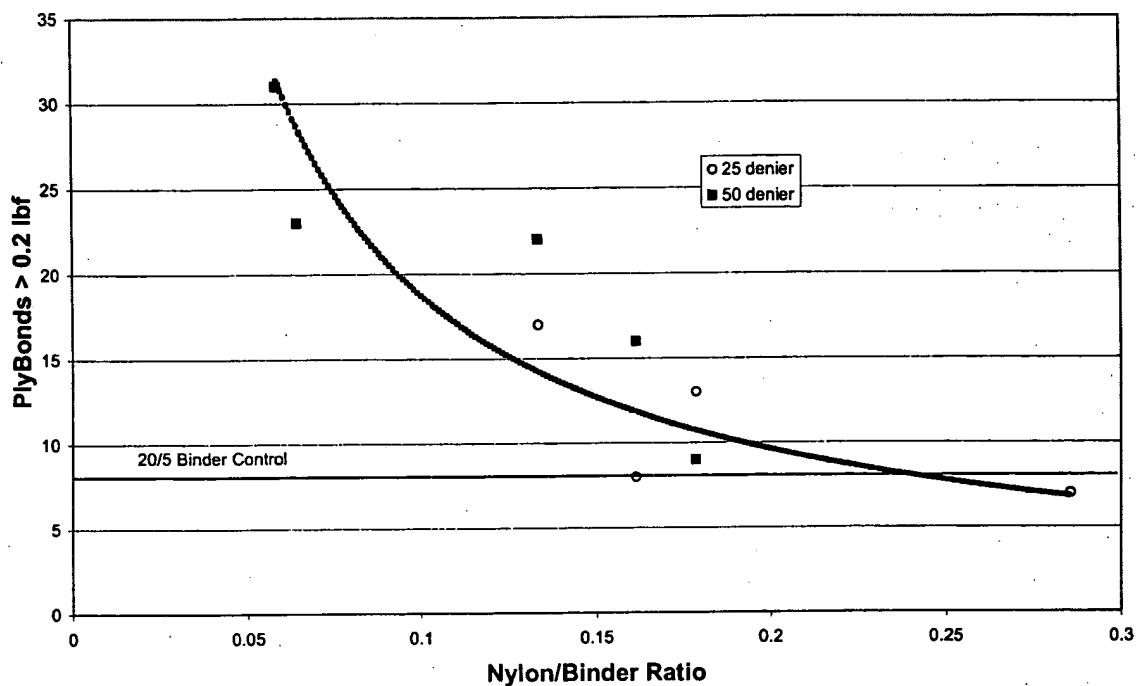
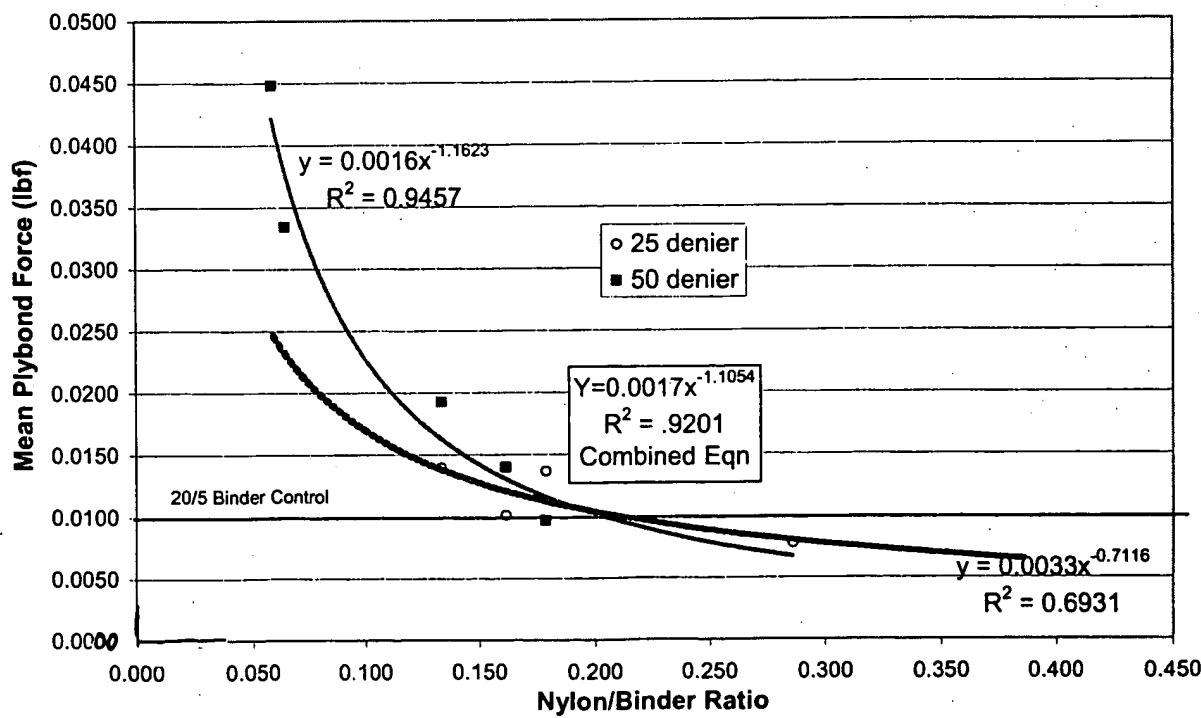


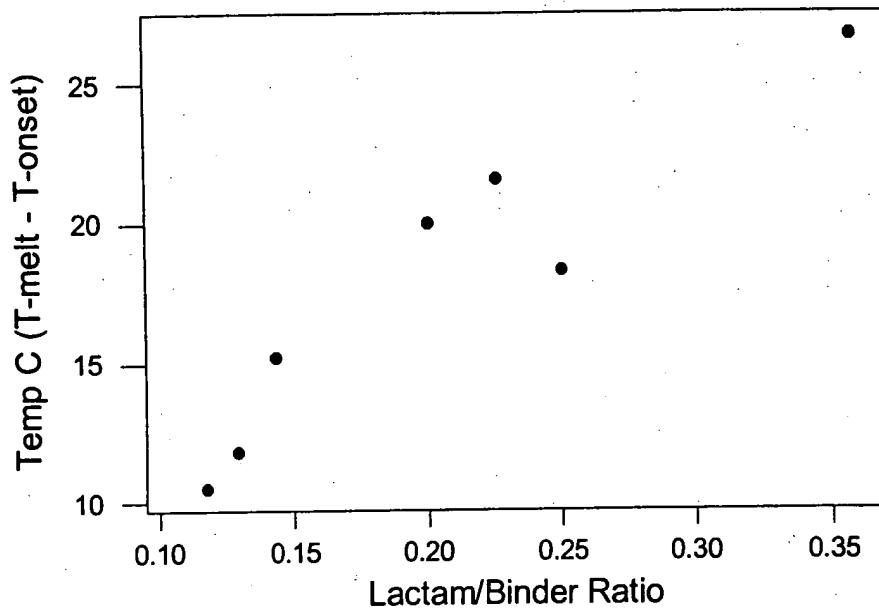
Fig  
④

### Mean Force vs Nylon/Binder Ratio By Bundle Denier



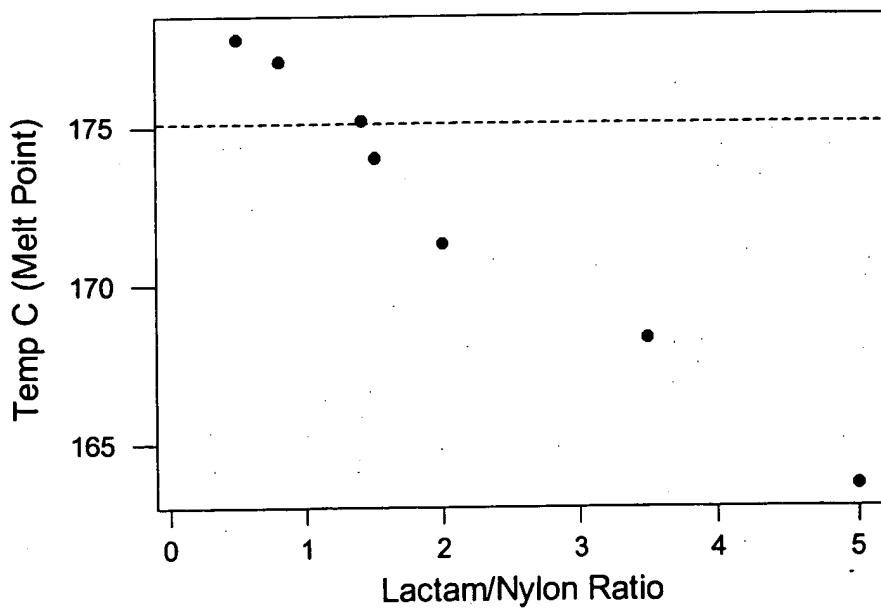
Binder Phase Melt Point (Sharpness) vs Lactam/Binder Ratio  
25 denier bundle

Fig  
5



Binder Phase Melt Point vs Lactam/Nylon Ratio  
25 denier bundle

Fig  
6



### Mixture Contour Plot of Onset

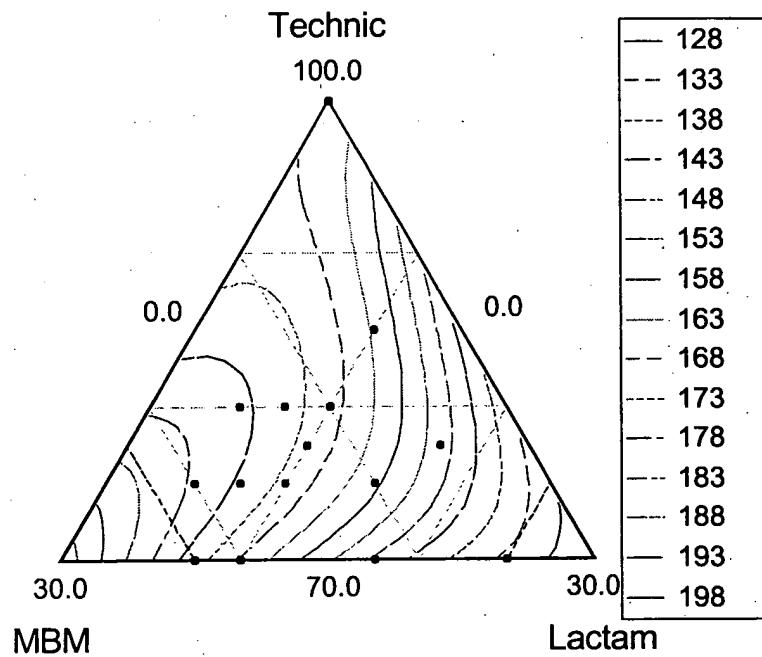


Fig.7

### Mixture Contour Plot of 1st Tm

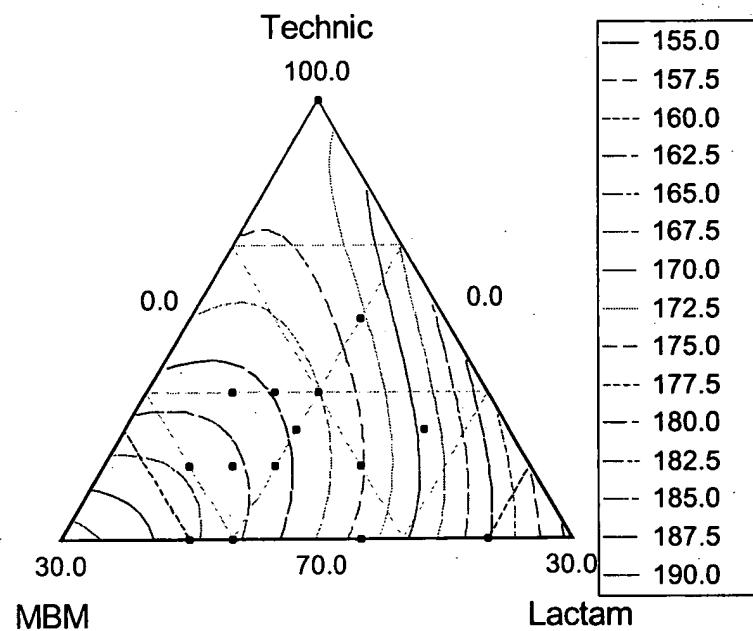


Fig.8

Mixture Contour 1st T(melt) - T(onset)

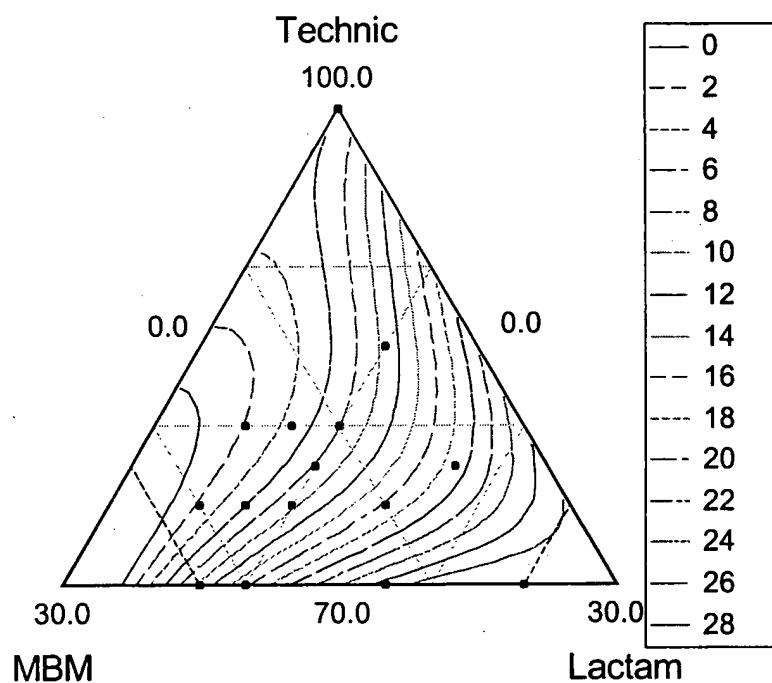


Fig. 9

Mixture Contour Plot of 2nd T<sub>m</sub>

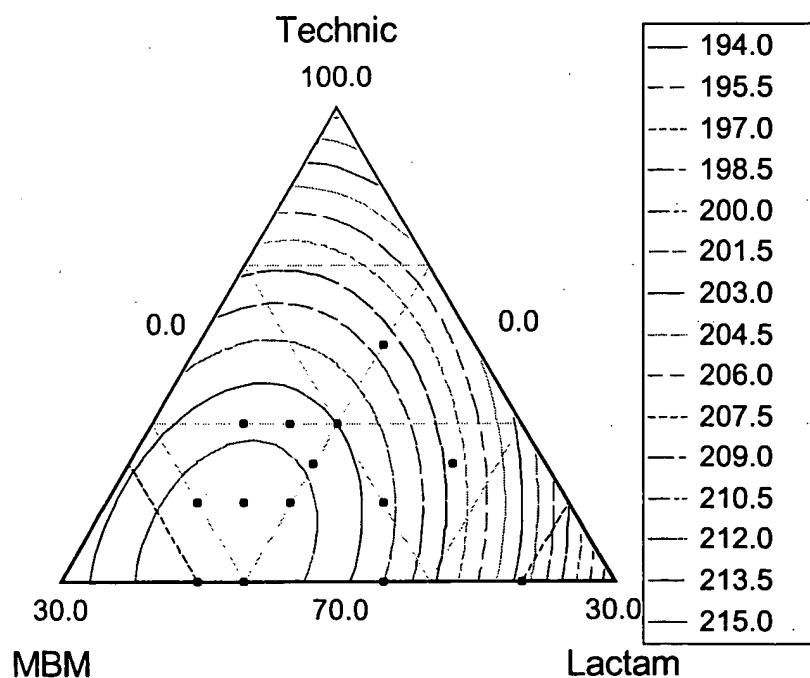


Fig. 10

Mixture Contour Plot of Strain

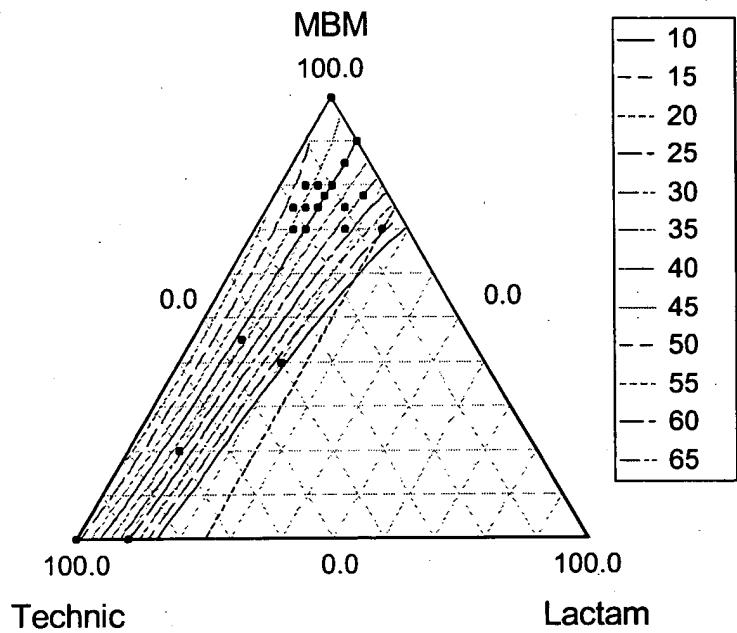


Fig.11

Mixture Contour Plot of Tenacity

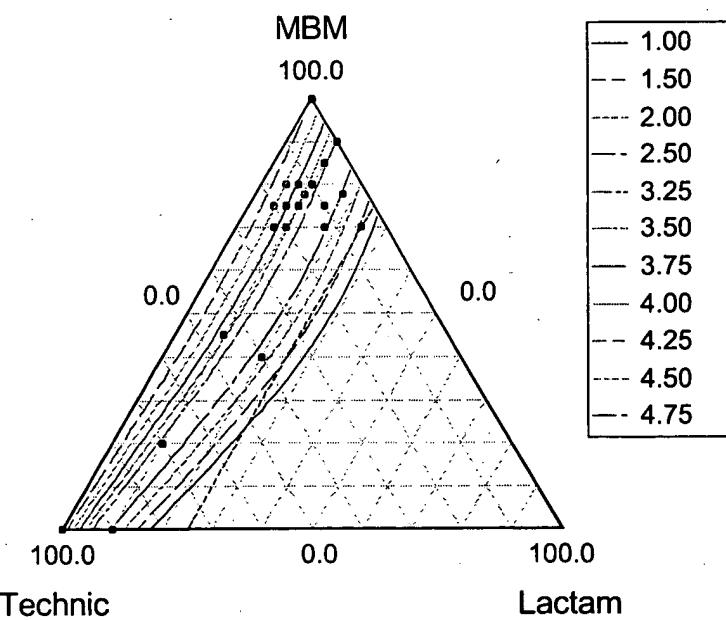


Fig.12

Onset of Melting Temp for Technic Phase vs Lactam Conc.  
Average Onset Values (C)

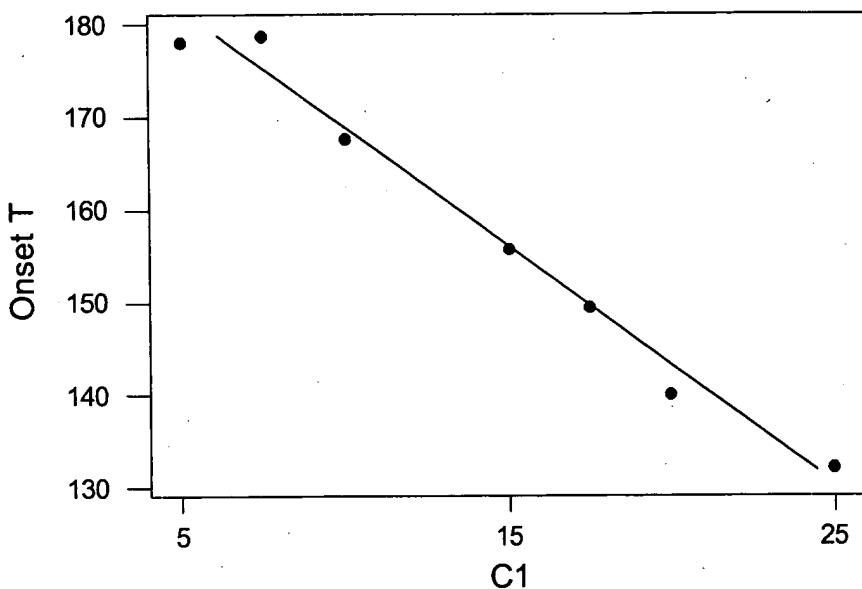


Fig.13

Melting Temp for Technic Phase vs Lactam Conc/Nylon 6 Ratio.  
(Degree C)

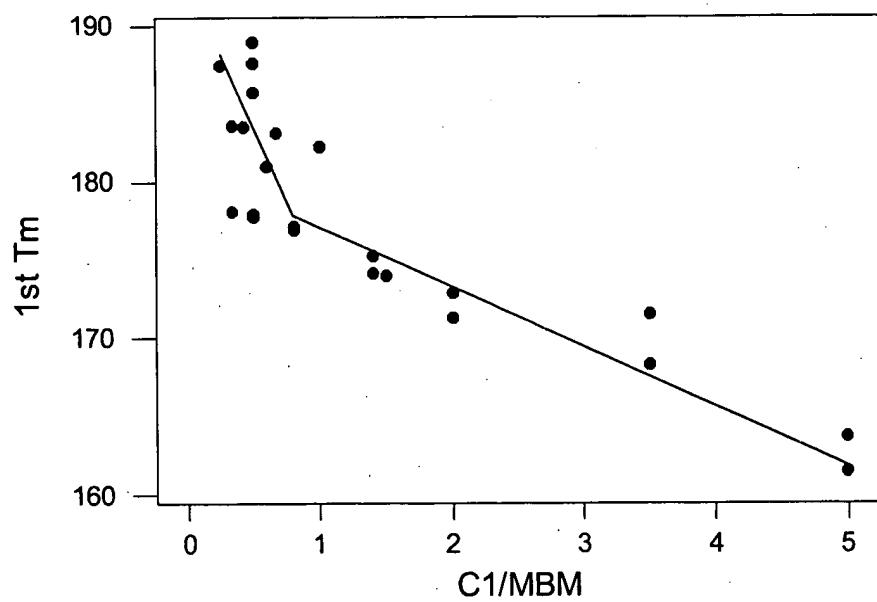


Fig.14

Temp(Melt) - Temp(Onset) vs Lactam/Technic Ratio  
(Degree C)

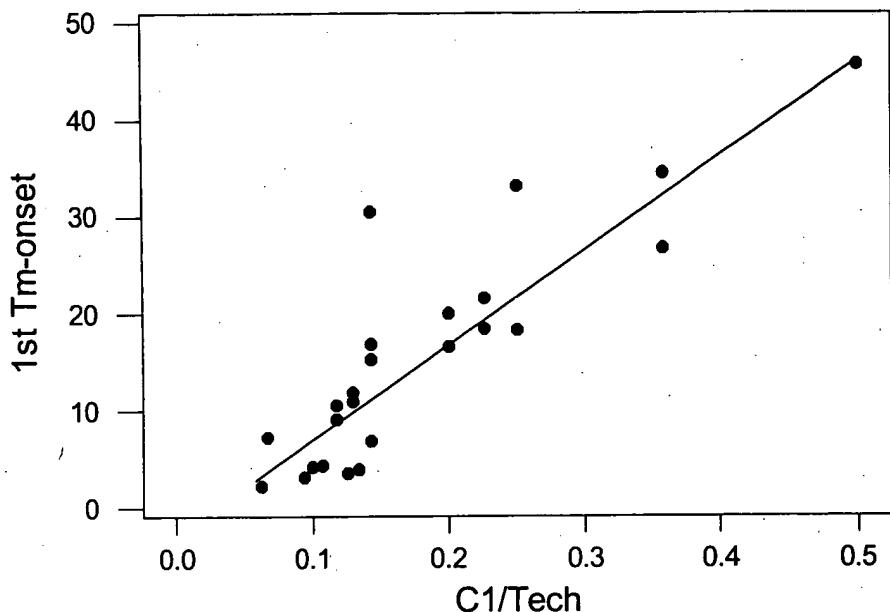


Fig. 15

Binder Fiber Tenacity (g/den) vs Lactam Concentration(%)

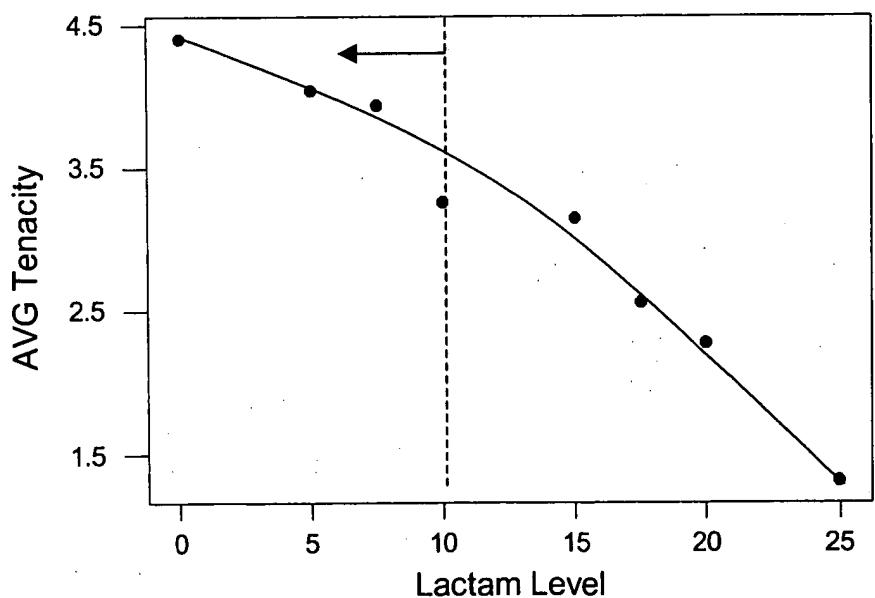


Fig 16

Binder Alloy - Melt Temperature Study  
Tenacity vs Melt Temperature  
(70/25/5 - Tech/N-6/Lactam)

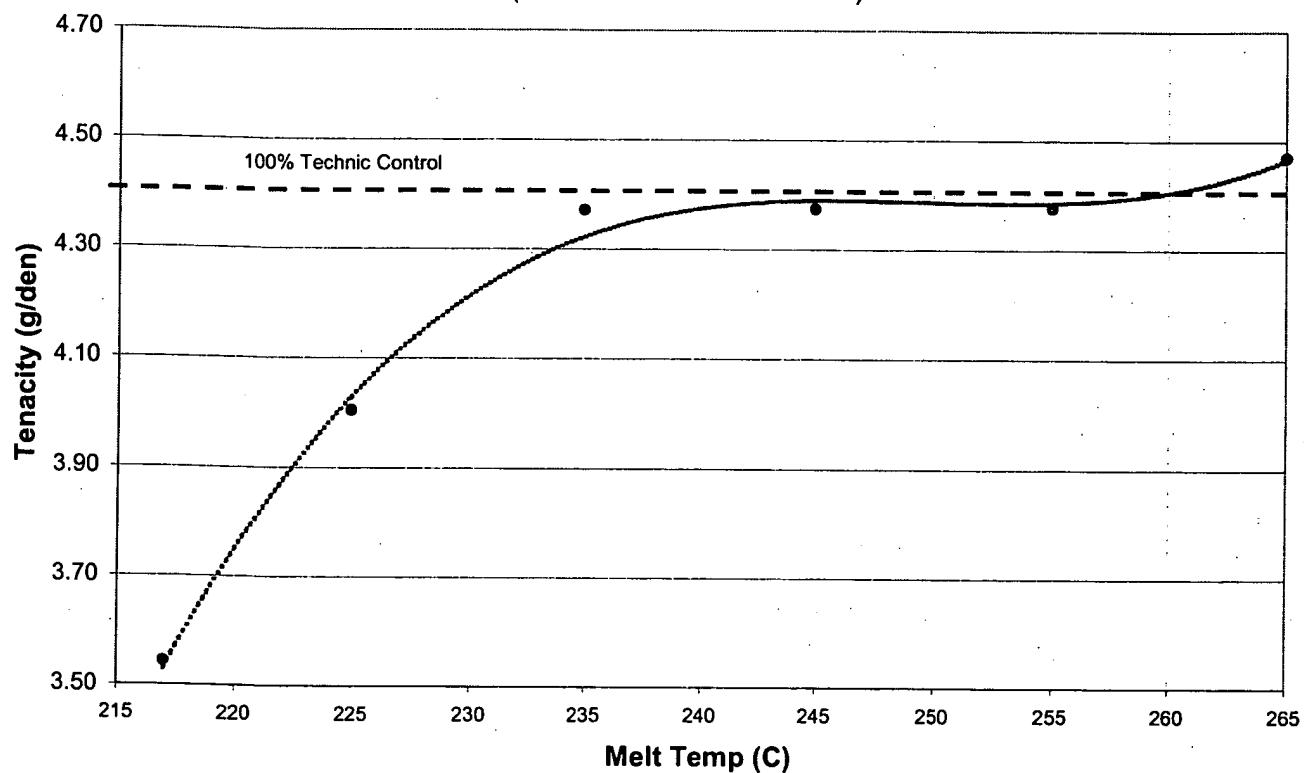


Fig. 17

Fig 18

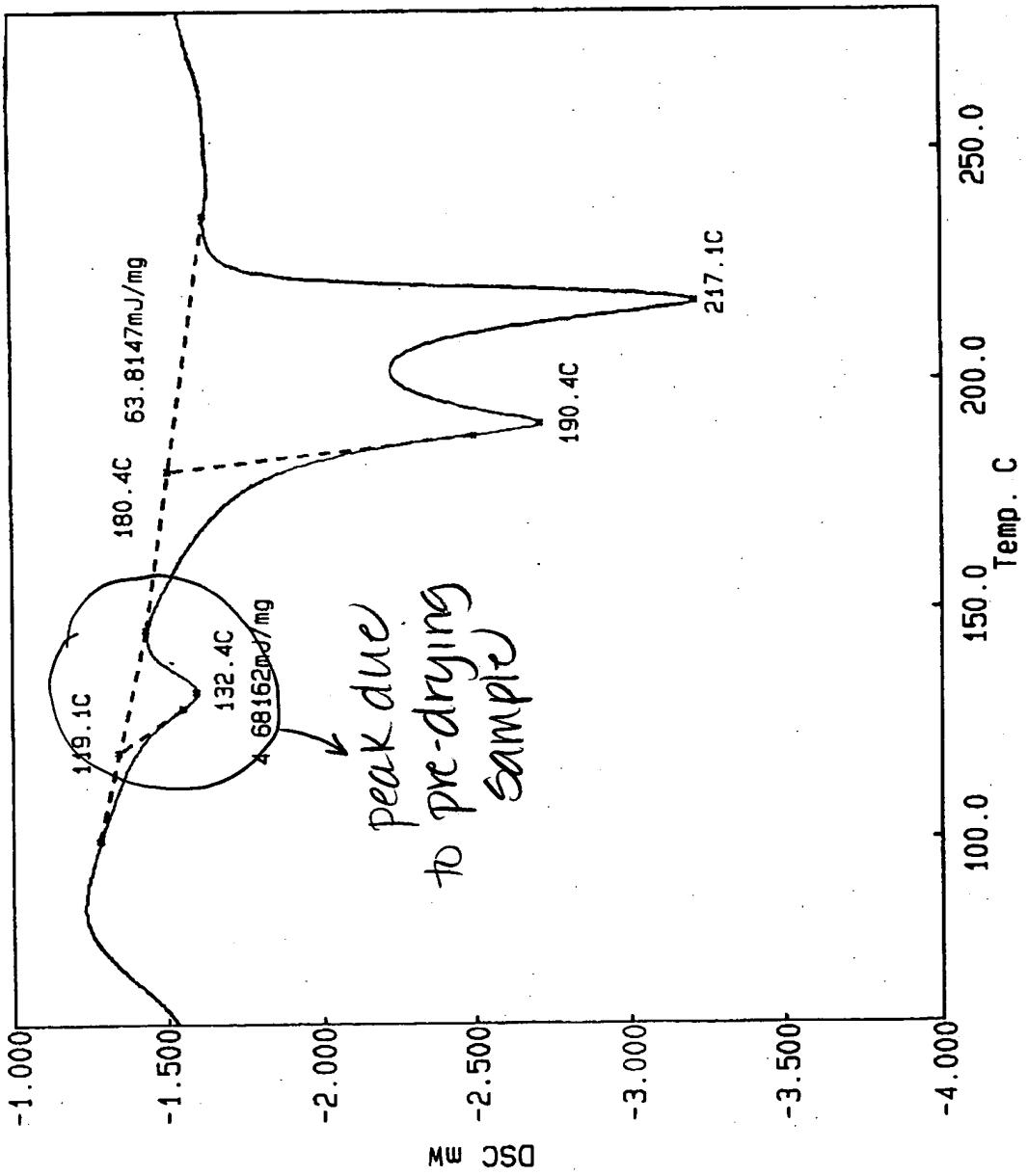
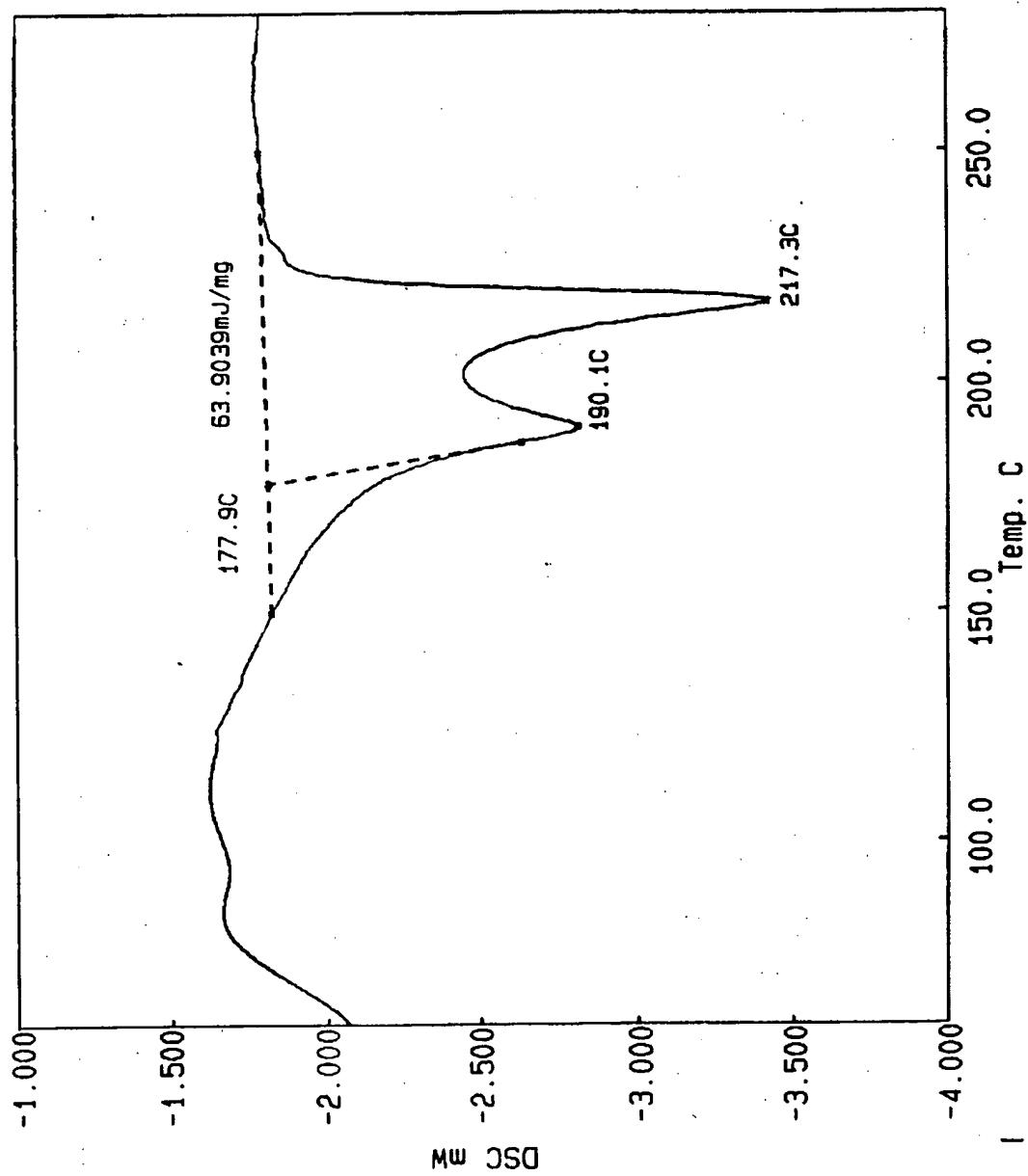


Fig. 19



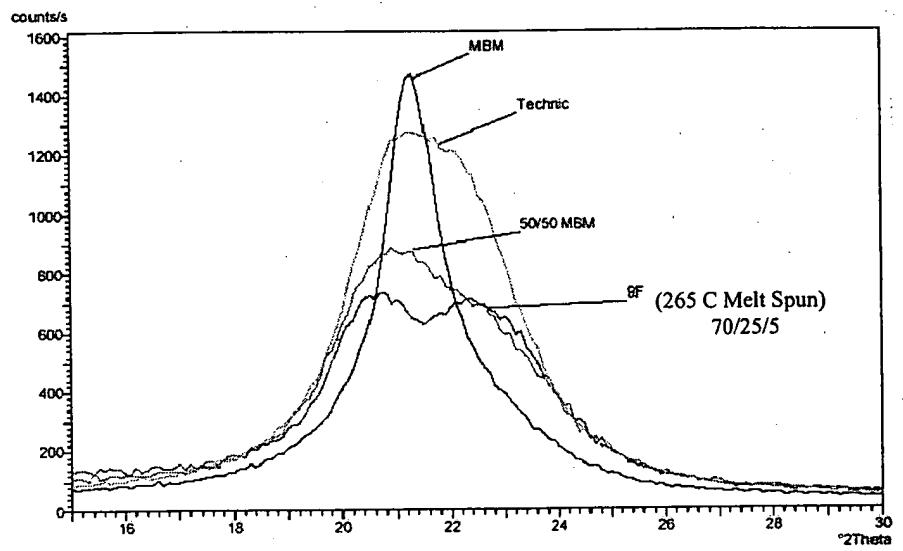


Fig. 20

Binder Alloy Project PD-242  
Lactam Effect on UE - at 255°C (Tech/MBM Ratio = 2.8)

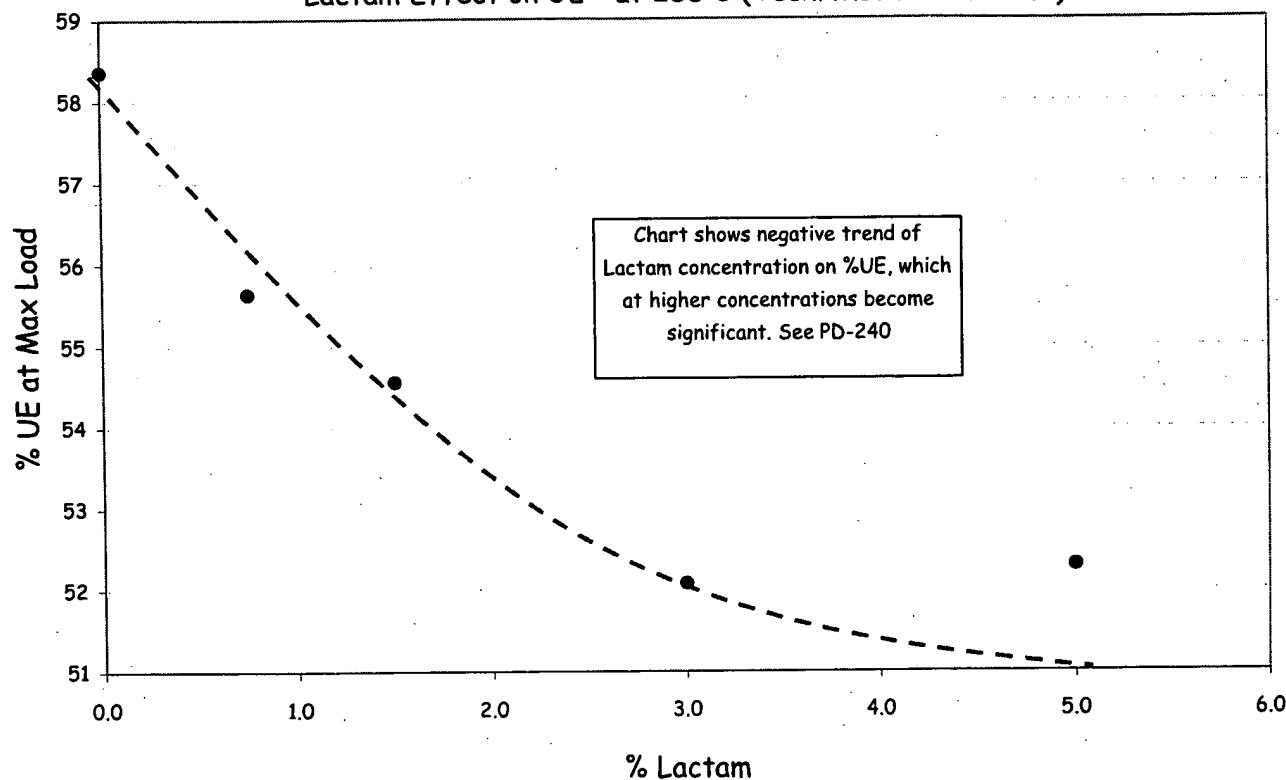


Fig. 21

Binder Alloy Project PD-242  
Lactam Effect on Tenacity - at 255°C (Tech/MBM Ratio = 2.8)

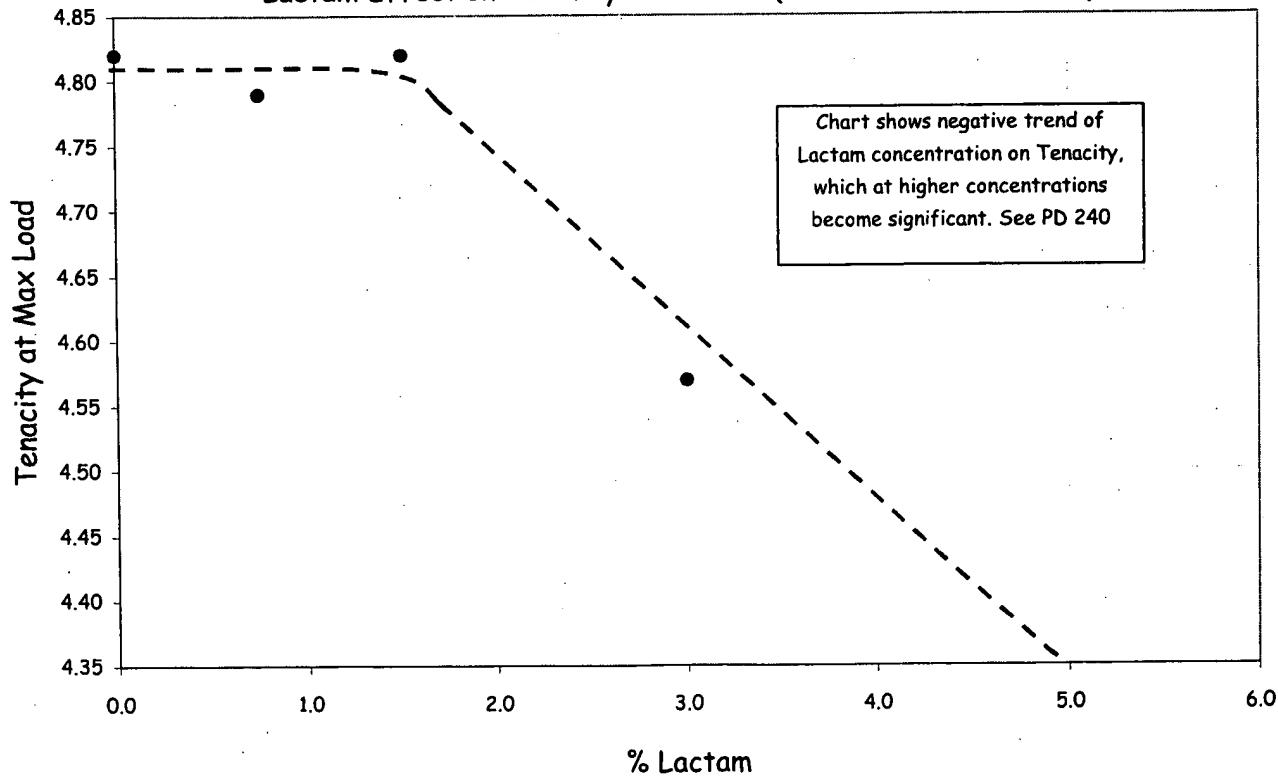
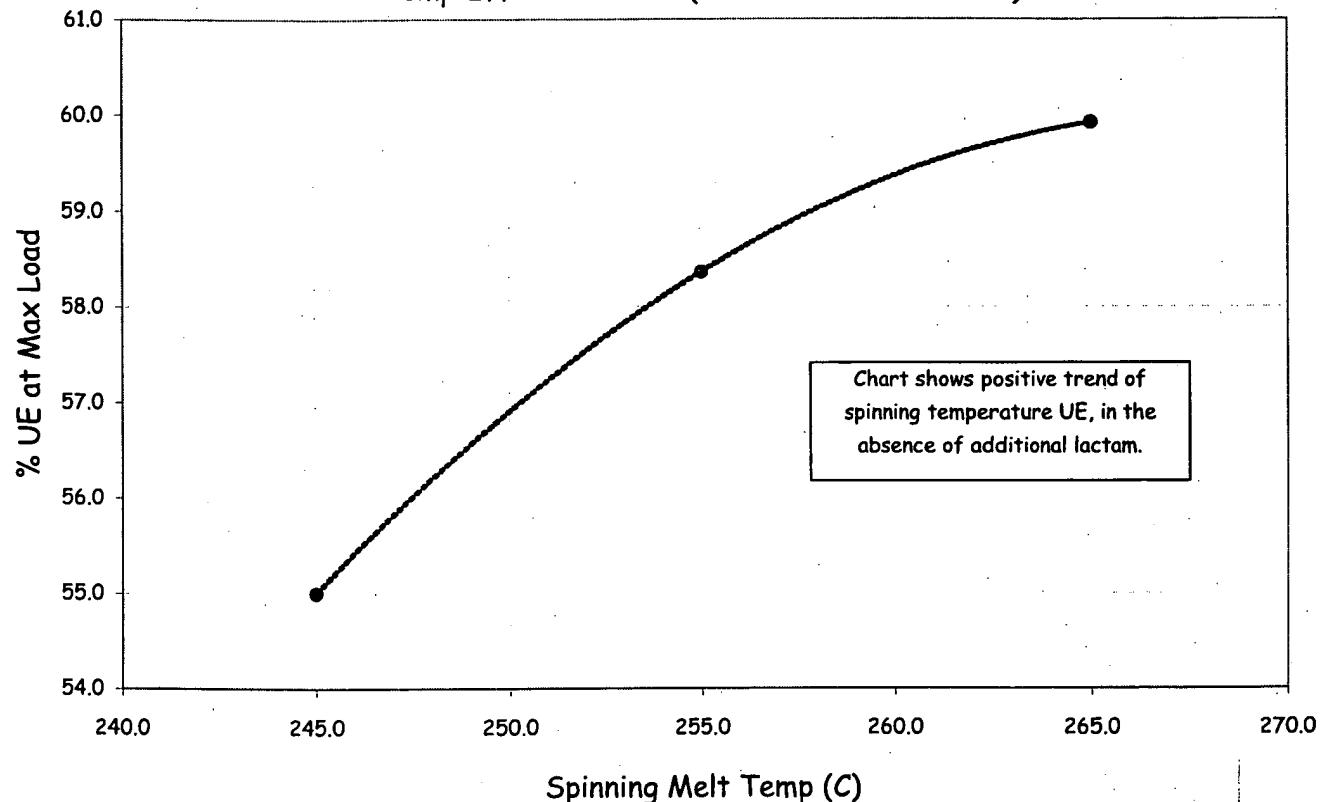
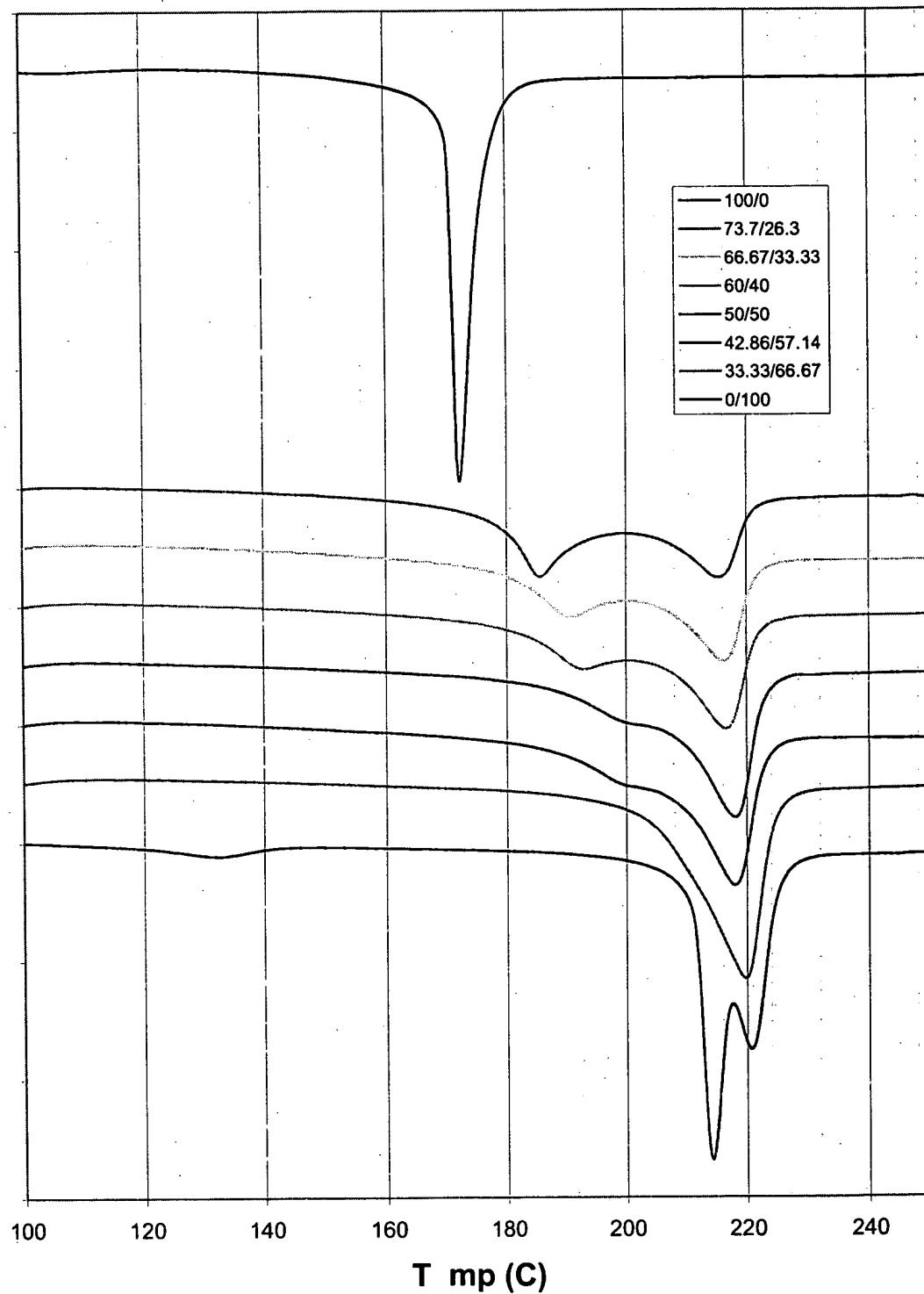


Fig. 22

Binder Alloy Project PD-242  
Temp Effect on % UE (Tech/MBM Ratio = 2.8)



**DSC Heat Scans of Technic/MBM Fibers**  
(No Additional Lactam)



(Background removed, Normalized)

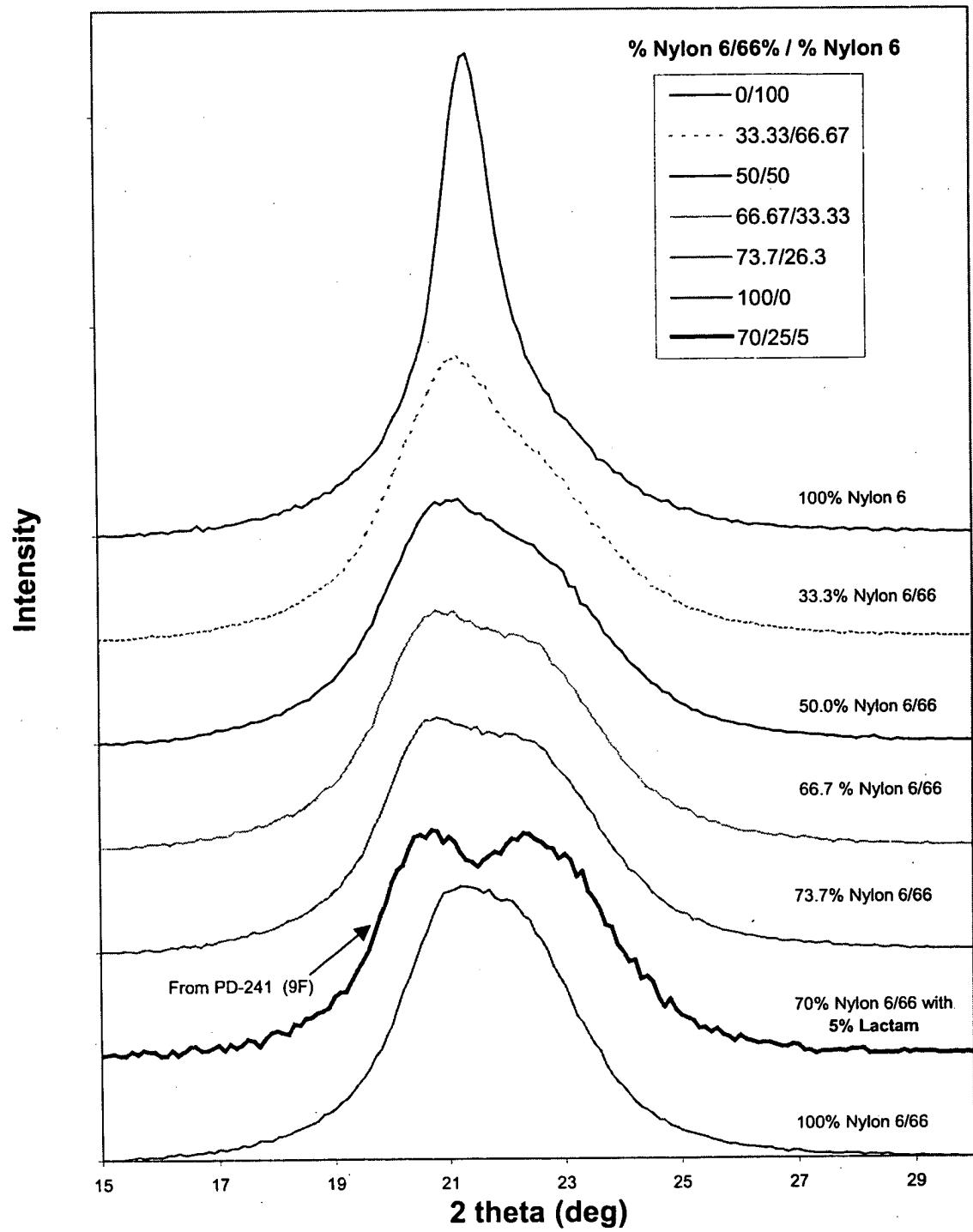


Fig. 25

Melt Point vs Technic Loading  
(All Samples)

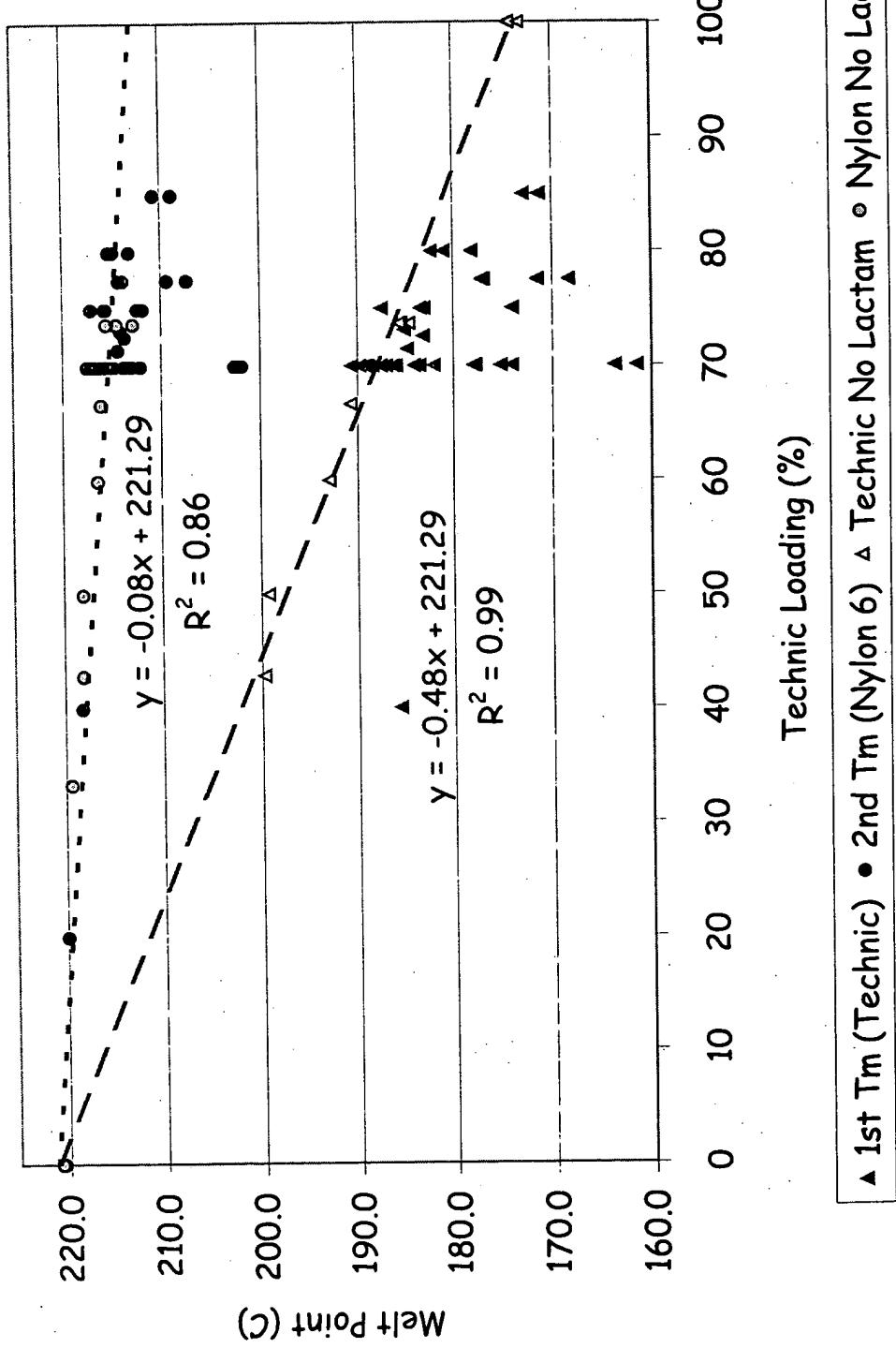


Fig. 2b

Melt Point vs Lactam/MBM Ratio  
(All Samples)

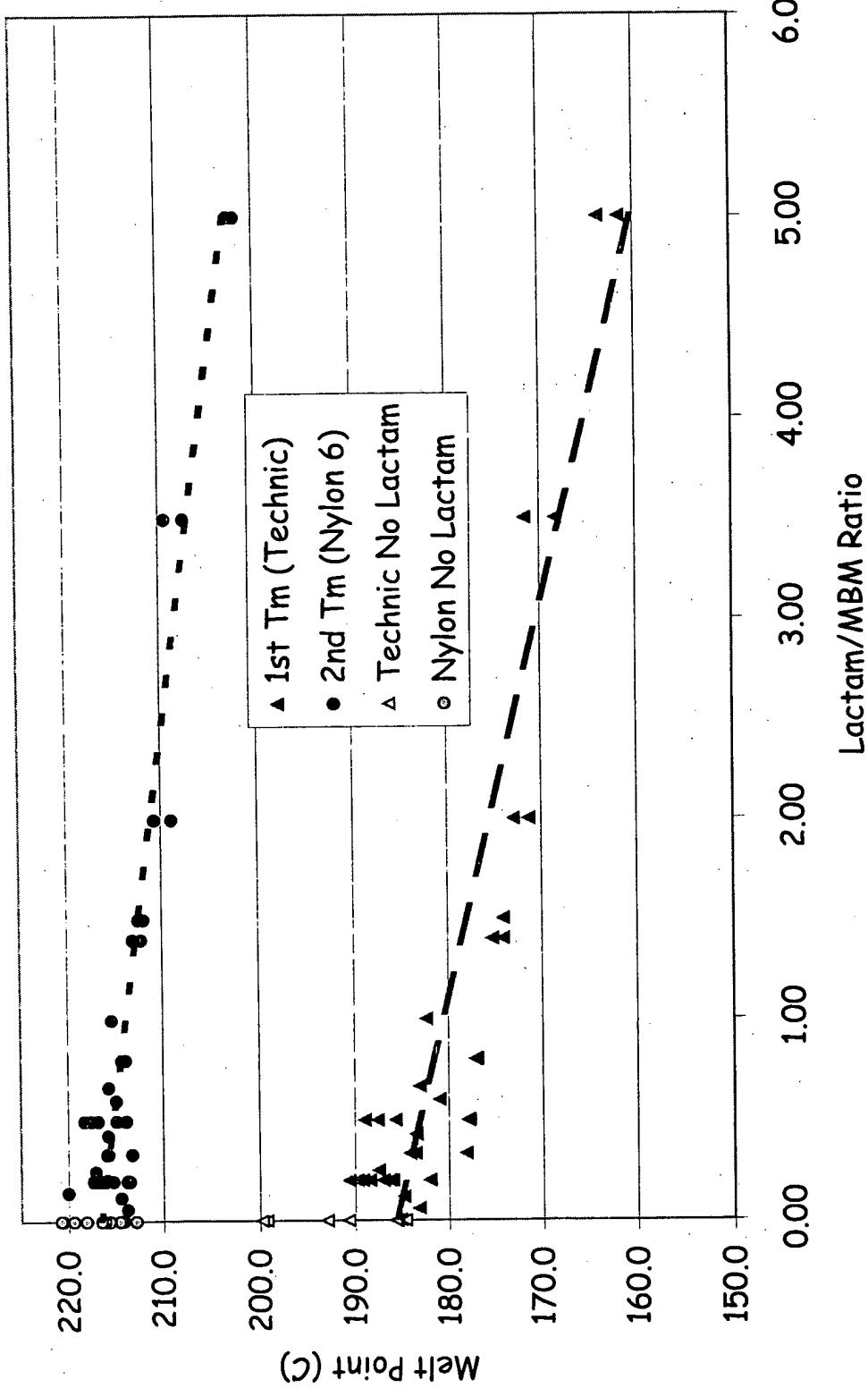


Fig. 27